SECTION 8

AMBIENT AIR IMPACT ANALYSES

The Boise site is located in Ada County, Idaho. Northern Ada County is a maintenance area for carbon monoxide (CO) and particulate matter smaller than ten microns (PM_{10}). Ada County is considered in attainment for all other pollutants. The Boise terminal is considered a major source of volatile organic compound (VOC) emissions, which are precursors to ozone. The terminal's PM_{10} and CO emissions are relatively minor and are respectively due to fugitive dust from roads and combustion by-products at the vapor incineration systems. Therefore, emissions from this facility are not expected to impact existing ambient air quality, attainment status, or classification of the area.

SECTION 9

COMPLIANCE CERTIFICATION PLAN

Compliance Determination

The following table lists all regulations identified in the existing permit requiring a compliance demonstration method. All emission points that the regulation applies to are identified, along with a brief description of the requirements. For each regulation, the table indicates if the facility is in or out of compliance and how compliance will be demonstrated. The checklists used for recordkeeping and reporting purposes are shown after the compliance determination table. The checklists identify the applicable permit condition number, the submittal requirements such as semiannual, annual, as needed, etc., and the frequency of monitoring, if required, such as daily, weekly, monthly. As shown in the compliance determination table, some permit conditions require data to be readily available and some conditions require notification or submittal of data to the State.

The Boise terminal is currently in compliance with all applicable regulations.

Compliance Determination/Demonstration Method
Boise Terminal

Emission Points	Regulation ID	Description	Source Type	Regulated Pollutant or Activity	Allowable Limit or Requirement	Compliance		
						In	Out	Demonstration Method
Idaho State Regulations - IDAPA 58.01.01, "Rules for the Control of Air Pollution in Idaho"								
Facility-Wide	132	Correction of Condition	General	Excess emissions	Complete appropriate and reasonable corrective actions. Submit report.	X		Submit Report/Checklist
Facility-Wide	133	Startup, Shutdown, and Maintenance Requirements	General	Any equipment or emission unit	Notify Department, report and record event.	X		Submit Report/Checklist
Facility-Wide	134	Upset, Breakdown, and Safety Requirements	General	Any equipment or emission unit	Implement good practices, expedite as possible, minimize impacts, notify Department, report and record event.	X		Submit Report/Checklist
Facility-Wide	135	Excess Emissions Reports	General	Excess emissions	Complete report with required information.	X		Submit Report/Checklist
Facility-Wide	136.01,.02,.03	Excess Emissions Records	Excess Emissions Records	Excess emissions	Record and maintain records as required.	X		Recordkeeping/Checklist
Facility-Wide	157	Test Methods and Procedures	General	Source test	Provide notice; conduct in accordance with State procedures.	X		Submit Notice and Report/Checklist
Facility-Wide	322.06,.07,.08,.09,.11	Standard Contents of Tier I Operating Permits	General	Monitoring, Recordkeeping, Reporting, Testing and Periodic Compliance Certifications	Comply as specified in permit.	X		Monitoring, Recordkeeping, Testing, Report/Checklist
Facility-Wide	600-616	Rules for Control of Open Burning	General	Open Burning	Facility shall comply with open burning requirements to minimize impacts.	X		Reasonable Precautions
Facility-Wide	625	Visible Emissions	General	Opacity	No greater than 20% opacity for more than 3 minutes in any 60 minute period	X		Submit Report/Checklist
Facility-Wide	650-651	Rules for Control of Fugitive Dust	Roads	Particulate matter	All reasonable precautions shall be taken to prevent particulate matter from becoming airborne	X		Reasonable Precautions
Facility-Wide	728	Distillate Fuel Oils	Diesel Fuels	Sulfur	ASTM Grade 1 Fuel Oil - 0.3% sulfur by weight; ASTM Grade 2 Fuel Oil - 0.5% sulfur by weight	X		Shipper Agreement

Emission Points	Regulation ID	Description	Source Type	Regulated Pollutant or Activity	Allowable Limit or Requirement	Compliance		
						In	Out	Demonstration Method
Facility-Wide	775-776	Rule for Control of Odors	General	Odors	No odorous gases, liquids or solids can be released in such quantities as to cause air pollution	X		Recordkeeping/Checklist
Truck Loading Rack and Vapor Containment and Destruction System	625	Visible Emissions	Incineration units	Opacity	No greater than 20% opacity for more than 3 minutes in any 60 minute period	X		Submit Report/Checklist
On-Site and Norwood Soil Vapor Extraction Systems	322.01,.07	Standard Content of Tier I Operating Permits	Thermal Oxidizer	Firing of Unit	Unit shall be fired exclusively by system vapors and/or natural gas, and records shall be maintained for five years.	X		Recordkeeping/Checklist
On-Site and Norwood Soil Vapor Extraction Systems	625	Visible Emissions	Incineration units	Opacity	No greater than 20% opacity for more than 3 minutes in any 60 minute period	X		Submit Report/Checklist
Insignificant Activities	317.01	Applicability Criteria for Insignificant Activities	Insignificant Activities	Welding and water and space heaters.	Section contains criteria for identifying insignificant activities under the Tier I operating permit program.	X		Submit required information with operating permit application.
Insignificant Activities	322.06	Monitoring Requirements for Tier I Operating Permits	Insignificant Activities	Welding and water and space heaters.	No additional monitoring, recordkeeping, or reporting is required beyond facility-wide requirements for insignificant activities.	X		See facility-wide requirements.
Permit Requirements								
On-Site Soil Vapor Extraction System*	Permit #0020-0026	State of Idaho - Permit to Construct	Vapor Extraction System	Benzene, TSP, PM_{10}, NO_x, CO, VOC, SO_2, opacity	Benzene - 0.054 lbs/hr; TSP, PM_{10} - 0.012 lbs/hr; NO_x - 1.2 lbs/hr; CO - 0.74 lbs/hr; VOC - 5.7 lbs/hr; SO_2 - 0.0015 lbs/hr; Monitoring, operating, and reporting requirements are also specified	X		Submit Report/Checklist
40 Code of Federal Regulations (40 CFR)								
Facility-Wide	Part 60, Subpart A	Standards of Performance for New Sources – Gen. Prov.	Truck loading rack	Notification and recordkeeping;	Notification of construction date, startup dates, actual startup date, and changes must be submitted; records must be maintained;	X		Recordkeeping/Checklist

Emission Points	Regulation ID	Description	Source Type	Regulated Pollutant or Activity	Allowable Limit or Requirement	Compliance		
						In	Out	Demonstration Method
Facility-Wide	Part 60, Subpart A	Standards of Performance for New Sources – Gen. Prov.	Truck loading rack	Performance tests.	Performance tests must be conducted in accordance with procedures contained within Subpart XX	X		Recordkeeping/Checklist t
Facility-Wide	Part 61 Subpart M	National Emission Standard for Asbestos	General	Asbestos	Must comply with requirements when conducting any renovation or demolition activities.	X		Compliance with Applicable Subpart
Facility-Wide	Part 68, Subpart A	General Chemical Accident Prevention Provisions	General	Regulated substances	Comply with requirements of this provision for regulated substances over threshold values.	X		Submit Report
Facility-Wide	Part 82 Subpart F	Recycling and Emissions Reduction	General	Recycling and emissions reduction	Comply with applicable standards for recycling and emissions reduction.	X		Compliance with Applicable Subpart
Storage Tanks (A201, 202, 203, 204, & 206))	Part 60 Subpart Kb	Standards of Performance for VOL Storage Vessels for which Construction, Reconstruction, or Modification Commenced After July 23, 1984	Tank (less than 75 m^3)	Record keeping	Records showing dimension and capacity of tank shall be readily accessible for the life of the tank	X		Recordkeeping/Checklist
Truck Loading Rack and Vapor Containment and Destruction System	Part 60 Subpart XX	Standards of Performance for Bulk Gasoline Terminals	Truck loading rack	Vapor collection; record keeping;	VOC emission from vapor collection system limited to 35 mg/l gasoline loaded;	X		Submit Report/Checklist
Truck Loading Rack and Vapor Containment and Destruction System	Part 60 Subpart XX	Standards of Performance for Bulk Gasoline Terminals	Truck loading rack	Inspections;	Racks and vapor collections systems must be inspected monthly, during loading, for vapor leaks;	X		Submit Report/Checklist

Emission Points	Regulation ID	Description	Source Type	Regulated Pollutant or Activity	Allowable Limit or Requirement	Compliance		
						In	Out	Demonstration Method
Truck Loading Rack and Vapor Containment and Destruction System	Part 60 Subpart XX	Standards of Performance for Bulk Gasoline Terminals	Truck loading rack	Performance testing;	Compliance must be demonstrated using test procedures specified;	X		Submit Report/Checklist
Truck Loading Rack and Vapor Containment and Destruction System	Part 60 Subpart XX	Standards of Performance for Bulk Gasoline Terminals	Truck loading rack	Reporting and recordkeeping;	Records on tank truck vapor tightness must be kept on file in a permanent form available for inspection, and updated yearly; a record of each monthly leak inspection shell be kept on file for at least two years;	X		Submit Report/Checklist
Truck Loading Rack and Vapor Containment and Destruction System	Part 60 Subpart XX	Standards of Performance for Bulk Gasoline Terminals	Truck loading rack	Truck loading operations	Vapor-tight gasoline tank trucks only; documentation shall be recorded for each truck; vapor tightness compliance is required.	x		Submit Report/Checklist

Compliance Plan Checklists/Forms

Below are the forms currently used by the facility to assure continued compliance with the Tier I operating permit monitoring and recordkeeping requirements.

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Daily LE & Flowrate
(No Submittal Required)

Day of Week	Date (sample at least once per day)	Time	Inspector Initials	Temperature of Influent to the Vapor Incinerator	LEL of Influent to the Vapor Incinerator (% by volume)	CO2 of Influent to the Vapor Incinerator (% by volume)	Volumetric Flowrate of Influent to the Vapor Incinerator (scfm)	Quantity of HC Supplied to the Vapor Incinerator from the Bioventing System (gallons/day)
example: Monday	3/23/2002	10:00:00	PKG	1500 F	1.00%	2.40%	750	1.37
Monday								
Tuesday								
Wednesday								
Thursday								
Friday								
Saturday								
Sunday								

How to calculate HC (developed by CRTC): gallons of HC = influent flowrate x {(LEL% x 0.005) + (CO2% x 0.074)}

Year:
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Weekly Fugitive Emission Inspection
(No Submittal Required)

Date	Time	Inspector Initials	Source of Emissions (none if applicable)	Existing Conditions (windy, etc.)	Corrective Action Taken (water spray etc.)	Date Corrective Action Taken
example: 3/19/2001	10:00:00	PKG	Tank Yard	southeast wind, 40 degrees F	water spray	3/23/2001

Year:
Month:
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Monthly Inspection ...ie Vapor Collection Syste ...or Processing System, and the Loading Rack

Date of Inspection	Time	Place *	Findings: Location of Leak or No Leak Detected (Using Sight, Sound or Smell)	Nature of Leak, If Detected	Severity of Leak, If Detected	Leak Determination Method	Date Repaired	Reason if Repaired After 15 Days of Detection	Inspector Name, Signature & Affiliation	Submit with Semiannual Report
example: 3/01/2001	10:00:00	VCS	leak in pipe	loose valve	slow leak	sound	3/1/2001	N/A	Joe Smith, CPL	mark for submittal
example: 3/01/2001	13:00:00	LR	hose	defective hose	slow leak	sight	3/16/2001	hose on order	Joe Smith, CPL	mark for submittal
example: 3/01/2001	11:00:00	VPS	no leak	N/A	N/A	N/A	N/A	N/A	Joe Smith, CPL	mark for submittal
		VCS								
		VPS								
		LR								

6/8/2005
Data required under condition B.17
* Vapor collection system (VCS), vapor processing system (VPS), or loading rack (LR) during loading of trucks.

Year:
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Quarterly VES Sampling and GC Analyses

Sampling Port Location (influent or effluent; need two of each)	Date Sample Collected	Time Sample Collected	Inspector Initials	Volumetric Flowrate (scfm) from bioventing wells *	Volumetric Flowrate (scfm) in P-101 suction line**	Volumetric Flowrate (scfm) in P-100 suction line***	Incinerator Operating Temperature at Time of Sample	For each sample: Composition	For each sample: average sample molecular weight	For each sample: net heating value	For each sample: composition of hydrocarbon fraction	For each sample: average molecular weight for each hydrocarbon fraction	For each sample: mole fraction of benzene in hydrocarbon fraction	For each sample: benzene mole fraction below detection limit?	Benzene detection limit of equipment	Submit within 30 days of date sampled. Sample no later than 10 days after the start of quarter in which system operated (1/1, 4/1, 7/1, 10/1). Submit to Air Quality Permit Compliance, Department of Environmental Quality, Boise Regional Office, 1445 N Orchard St, Boise, Idaho 83706-2239 and EPA Region 10, Air Operating Permits, OAQ-107, 1200 Sixth Avenue, Seattle, WA 98101
example: Influent	4/5/2001	13:00:00	PKG	500	500	500	1500F	see attached report						Yes	0.001	mark for submittal to DEQ and EPA by 5/05/01
Influent																
Influent																
Effluent																
Effluent																

*using flow element 201
**downstream of dilution air inlet using flow element 244
***downstream of dilution air inlet using flow element 214

6/8/2005
Data required under condition number C.10.2

Year:
Quarter:
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Quarterly Visible Emissions Inspection

Date	Time	Inspector Initials	Source of Emissions (opacity >20%; none if applicable)	Existing Conditions	Corrective Action Taken	Date Corrective Action Taken	Report Exceedance (>20%) in Annual Compliance Certification*
example: 4/02/2001	8:00:00	PKG	none	N/A	N/A	N/A	N/A

Year:
Month:
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Semiannual Tank Sulfur Content

Tank Number	ASTM Grade of Fuel Stored in Tank	Weight Percent of Fuel	Submit with Semiannual Report
example: 205-CPL	1	0.3	mark for submittal
9-CPL			
14-CPL			
162-CPL			
163-CPL			
164-CPL			
165-CPL			
166-CPL			
200-CPL			
201-CPL			
202-CPL			
203-CPL			
204-CPL			
205-CPL			
206-CPL			
207-CPL			

Year:
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Semiannual Tank Sulfur Content

Tank Number	ASTM Grade of Fuel Stored in Tank	Weight Percent of Fuel	Submit with Semiannual Report
400-CPL			
401-CPL			
402-CPL			
403-CPL			
404-CPL			
1-NWTC			
2-NWTC			
3-NWTC			
4-NWTC			
5-NWTC			
6-NWTC			
7-NWTC			
8-NWTC			
12-NWTC			
13-NWTC			
167-NWTC			

Year:
Month:
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Semiannual Tank Sulfur Content

Tank Number	ASTM Grade of Fuel Stored in Tank	Weight Percent of Fuel	Submit with Semiannual Report
208-NWTC			
209-NWTC			
A201-NWTC			
A202-NWTC			
A203-NWTC			
A204-NWTC			
A205-NWTC			
A206-NWTC			
A207-NWTC			

Gasoline D[illegible]y Tank Pressure Test - EPA R[illegible]e Method 27 (Annual Vapor Tightness Test)

Tank Truck Owner	Owner Address	Tank Truck ID	Testing Location	Date of Test	Tester Name	Witnessing Inspector Name, If Any	Test Results - Actual Pressure Change in 5 minutes, mm of water	Submit with Semiannual Report
example: ABC	111 Mainstreet, Anywhere, USA 00111	123abc	DEF, Anywhere, USA	3/23/2001	Joe Smith	None	-12	mark for submittal

Data required under condition number B.23

Vapor E tion System
Annual
Thermal Oxidizer Stack Emissions

Pollutant	lb/hr	Is lb/hr actual or allowable?	annual hours of operation	annual emissions (lb)	Submit with Periodic Compliance Certification
example: PM10	0.012	allowable	1000	12	
PM10					
NOx					
CO					
VOC					
SO2					
benzene					

Fugitive Emissi. ontrol - As Needed
(No Submittal Required)

Date	Time	Staff Initials	Location	Control Method Used
example: 3/23/01	15:00:00	PKG	Workyard	Water

6/8/2005
Data required under condition number A.2

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Fugitive Dust Complaint - As Needed
(No Submittal Required)

Date	Time	Complaint	Valid (yes/no)	Corrective Action Taken	Date Corrective Action Taken
example: 3/23/01	8:00:00	Dust entering yard of Mary Smith at 350 Elm St.	Yes	Water Spray	3/23/2001

Yea.
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Odor Comp. .it - As Needed
(No Submittal Required)

Date	Time	Staff Initials	Complaint	Valid (yes/no)	Corrective Action Taken	Date Corrective Action Taken
example: 3/23/2001	22:00:00	PKG	Sulfur smell complaint from neighbor, John Doe, at 123 Elm St.	No	None	N/A

A .eeded - Prior to Start utdown, or Maintenance

Date	Time	Staff Initials	Specific Location	Equipment or Emissions Unit Involved	Call (208)-373-0313 to Determine If Atmospheric Stagnation Advisory and/or a Wood Stove Curtailment Has Been Declared	Cause of Event and Whether Startup, Shutdown or Maintenance	Submit 2 Hours Prior to Event - Fax to (208)-373-0287 or call (208) 373-1550
example: 5/01/01	7:00:00	PKG	Vapor Extraction System	Thermal Oxidizer	called, conditions ok	Startup	Faxed 5/01/01, 5:00 a.m.

Year:
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As Needed - Post Startup, Shutdown, Maintenance Excess Emissions Report

Time Period of Excess Emissions	Equipment or Unit ID	Cause of Event and Whether Startup, Shutdown, or Maintenance	Quantity of Each Pollutant Emitted Above Emission Standard	Corrective Action	Responsible Official Sign to Certify Compliance w/ 131, 132, 133.01, 134.01 - 134.03, 135 and 136*	If Requesting Compliance under 131.02 Responsible Official Sign to Certify Compliance w/ 131, 132, 133.01 - 133.03, 134.01 - 134.05, 135 and 136*	Maintain Report in Log Book On-Site	Submit Report within 15 days after start of event. Submit to Air Quality Permit Compliance, Department of Environmental Quality, Boise Regional Office, 1445 N Orchard St, Boise, Idaho 83706-2239 and for NSPS Equipment Submit to EPA Region 10, Air Operating Permits, OAQ-107, 1200 Sixth Avenue, Seattle, WA 98101
example: 5/01/01; 7:00 am - 8:00 am	Thermal Oxidizer	Startup	Total VOC = 6 lb/hr; Total benzene = 0.06 lb/hr	none	responsible official sig.	N/A	✓	mark for submittal by 5/16/01 to DEQ

6/8/2005

* Signature confirms that based on information and belief formed after reasonable inquiry, the statements and information in this document are true, accurate, and complete.
Data required under condition number A.9.4.

Upset, Breakdown or Safety . .ent - Initial Report - As Needed

Date	Hour	Staff Initials	Specific Location	Equipment or Emissions Unit Involved	Cause of Event and Whether Upset, Breakdown, or Safety Event	Submit within 24 hours after start of event - Fax to (208)- 373-0287 or call (208) 373-1550
example: 5/15/01	9:00:00	PKG	Loading Rack	Vapor Collection System	Upset, connection disrupted, vapors escaped to ambient air.	Faxed, 9:30 am, 5/15/01

Upset, Breakdown, or Safety Event - Emissions Final Report - As Needed

Time Period of Excess Emissions	Equipment or Unit ID	Cause of Event and Whether Due to Upset, Breakdown, or Safety Event	Quantity of Each Pollutant Emitted Above Emission Standard	Corrective Action	Responsible Official Sign to Certify Compliance w/ 131, 132, 133.01, 134.01, 134.03, 135 and 136*	If Requesting Compliance under 131.02 Responsible Official Sign to Certify Compliance w/ 131, 132, 133.01 - 133.03, 134.01, 134.05, 135 and 136*	Maintain Report In Log Book On-Site	Submit Report within 15 days after start of event. Submit to Air Quality Permit Compliance, Department of Environmental Quality, Boise Regional Office, 1445 N Orchard St, Boise, Idaho 83706-2239 and for NSPS Equipment Submit to EPA Region 10, Air Operating Permits, OAQ-107, 1200 Sixth Avenue, Seattle, WA 98101
example: 5/15/01, 9:00am - 9:15 am	Vapor Collection System	Upset, connection disrupted, vapors escaped to ambient air.	Total VOC = 40 milligrams/liter of gasoline	Stopped loading; corrected connection.	responsible official sig.	N/A	✓	mark for submittal by 5/30/01 to DEQ & EPA

6/8/2005
Data required under condition number A.9.4

NSPS Storage Vessel Dimensions

Tank Number	Tank Height	Tank Radius	Capacity Calculation	No Submittal Required - Retain this record for life of tank
A201				
202				
203				
204				
206				